

## CLAIMS

Having thus described our invention, what we claim as new, and desire to secure by letters patent is:

- 1 1. An apparatus for providing instant information service for a plurality of devices (13, 2 14, and 15) characterized by comprising:
  - 3 network connecting unit (52) for fetching data from backend servers (41, 42, 43)
  - 4 and packaging the data into XML elements;
  - 5 cache (53) for caching the XML elements formed by said network connecting unit
  - 6 (52) by packaging; and
  - 7 controller (51), in response to a request for information service from a client, for
  - 8 fetching relevant XML elements from cache (53), and for the XML elements that cannot
  - 9 be fetched from the cache (53), instructing the network connecting unit (52) to fetch
  - 10 corresponding data from backend servers and obtaining the XML elements formed by the
  - 11 network connecting unit (52) by packaging, and finally packaging all the fetched XML
  - 12 elements into a XML document and sending it back to the client.
- 1 2. The apparatus according to Claim 1, characterized in that the cache (53) comprises an 2 indexing mechanism for creating indices for all the XML elements stored in the cache 3 (53).
- 1 3. A method of providing instant information to variety of apparatuses (13, 14, and 15) 2 characterized in comprising the following steps performed on a server of:
  - 3 receiving a request for information service from a device;
  - 4 fetching XML elements which are relevant to the request for information
  - 5 service from a local cache (53);

6       if no relevant XML elements are fetched from the local cache, fetching  
7    corresponding data from backend servers, packaging the data into XML elements in the  
8    local cache (53); and

9            packaging all the fetched XML elements into a XML document and sending it  
10   back to the device.

1   4. The method according to Claim 3, characterized by further comprising a step of  
2   creating indices for the XML elements stored in the cache (53).